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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/089,567 | 04/02/2002 | Shigeru Kamegaya | 040356-0439 | 4492 |

22428 7590 07/01/2005

FOLEY AND LARDNER
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

CREPEAU, JONATHAN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1746

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,567

Applicant(s)

KAMEGAYA ET AL.

Examiner

Jonathan S. Crepeau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 10, 16 and 20 is/are rejected.
- 7) ☒ Claim(s) 8, 11-15 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action addresses claims 1-20. Claims 8, 11-15 and 17-19 remain objected to as containing allowable subject matter, and claims 1-7, 9, 10, 16, and 20 remain rejected under 35 U.S.C. 102 for the reasons of record. Accordingly, this action is made final.

Claim Rejections - 35 USC § 102

2. Claims 1-7, 9, 10, 16, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000-063104. The reference is directed to a fuel cell system comprising a reformer (36) and a gas supply device (26) provided upstream of the reformer (see abstract; Fig. 1). The gas supply device generates a high temperature gas for supplying to the reformer upon startup of the fuel cell (see abstract). Regarding claims 2 and 9, the device comprises a first fuel supply mechanism (48) for supplying fuel, which is subsequently burned in a combustion chamber (46). A second fuel supply mechanism (42) downstream of the first supplies further fuel (see par. [0021] of the machine translation). Regarding claims 3 and 9, a first air supply mechanism (60b) is located downstream of the first fuel supply mechanism (see pars. [0035], [0023]). Regarding claim 4, the temperature of the combustion gas can be adjusted by adjusting the amounts of fuel and air supplied (see par. [0035]). Regarding claim 6, a vaporizer (24) vaporizes fuel to be supplied to the gas supplying device (see par. [0019]). Regarding claim 5 and the second clause of claim 6, these are process limitations that are not considered to distinguished the claimed apparatus over

the reference (see MPEP §2114). Regarding claim 7, air is supplied downstream of the second fuel supply (42) mechanism at 60b. Regarding claim 9, the air is mixed with combusted gas at a mixing part (66). Regarding claim 10, the second fuel supply mechanism is supplied on the side face of the mixing part (see Fig. 1). Regarding claim 16, a CO removal device (28) is positioned downstream of the reformer. Regarding claim 20, a combustor (24) is positioned downstream of the fuel cell anode and cathode exhaust.

Thus, the instant claims are anticipated.

Response to Arguments

3. Applicant's arguments filed May 2, 2005 have been fully considered but they are not persuasive. Applicant asserts that claim 1 is patentably distinguishable from Okada because in the reference, the gas supplied during startup is merely a high temperature gas not containing the claimed fuel component for the reforming reaction. While this assertion may have merit, it is the Examiner's position that this limitation is directed to the method of operating the claimed apparatus and does not structurally limit the apparatus. In other words, the apparatus of Okada is *capable* of being operated in the claimed manner, and as such is sufficient to meet the claim. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). See also MPEP 2114.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached at (571) 272-1414. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Crepeau
Primary Examiner
Art Unit 1746
June 27, 2005